44TH TURBOMACHINERY & 31ST PUMP SYMPOSIA
HOUSTON, TEXAS | SEPTEMBER 14 – 17 2015
GEORGE R. BROWN CONVENTION CENTER

Couplings and Rotating Machines

Peter Carlisle – John Crane
Steve Pennington – John Crane
Chris Rackham – John Crane
Matthew Davies – John Crane

TURBOMACHINERY LABORATORY
TEXAS A&M ENGINEERING EXPERIMENT STATION
TEXAS A&M UNIVERSITY

Peter Carlisle B.Sc. Mechanical Engineering and Diploma in Marketing

Peter joined John Crane in 1978 following his graduation from the University of Manchester (UK). During that time is roles have included the design, application and research into the fundamentals of power transmission couplings. Peter was Group Engineering Manager for many years before moving into commercial roles in Sales Management, as well as Operations Management. In the early 2005 Peter became responsible for the marketing of the Coupling Product line, and is currently the Senior Product Line Manager for Couplings and Hydrodynamic Bearings.

44TH TURBOMACHINERY & 31ST PUMP SYMPOSIA
HOUSTON, TEXAS | SEPTEMBER 14 – 17 2015
GEORGE R. BROWN CONVENTION CENTER

Steven Pennington is the Global Engineering Coupling Manager at John Crane, he manages a team of design engineers in Manchester controlling product standards and research and development. Products are verified using FEA and the technology lab containing static and dynamic test rigs able to recreate steady and cyclic conditions. Mr. Pennington has over 25 years of engineering experience in power transmission and rotating equipment. Mr. Pennington has a Mechanical Engineering degree from Manchester University, he is a Chartered Mechanical Engineer of the Institute of Mechanical Engineers

TURBOMACHINERY LABORATORY
TEXAS A&M ENGINEERING EXPERIMENT STATION
TEXAS A&M UNIVERSITY

Christopher (Chris) Rackham is Senior Application/Design Engineer for John Crane Power Transmission in Pasadena, Texas. He has been with John Crane since receiving his B.S. degree in Engineering from the Pennsylvania State University (1979). As Senior Application/Design Engineer he is responsible for the CAD and Application Engineering departments as well as field and technical support for the Western Hemisphere.

Mr. Rackham serves on the API Manufacturers Subcommittee on Couplings (671) and Pumps (610).

Matthew Davies is a Design and Development Engineer in the John Crane couplings team based in Manchester and has been with the company for 15 months. During this time he has worked on development of a new Low Speed - High performance coupling range and implementation of global 3D drawing systems amongst a range of other projects.

Prior to joining John Crane Matthew achieved a 1st Class Degree in Automotive Engineering from Manchester Metropolitan University and subsequently studied for a PGCert in Mechanical Engineering Design at the University of Manchester. After leaving higher education Matthew then worked for 3 ½ years as a Development Engineer in the design and manufacture of specialist rubber processing machinery for the tyre industry.

Course Description:

This course covers the application of couplings on rotating machines. It covers both drive and driven machines with their characteristics, and how this affects the coupling. It will also cover the various types of coupling in the market, and where they are utilised. It then looks at the oil and gas industry needs, and why certain couplings are preferred.

Other subjects that are included are shaft end connections, balancing, shaft alignment and failure analysis. It concludes with coupling selection, derived from the data provided from the customer.